

## Special Products

Date\_\_\_\_\_ Period\_\_\_\_

**Factor each perfect square trinomial. Always check for the GCF first!**

1)  $m^2 + 2m + 1$

2)  $k^2 + 6k + 9$

3)  $r^2 - 4r + 4$

4)  $1 - 2n + n^2$

5)  $25n^2 + 10n + 1$

6)  $4v^2 + 20v + 25$

7)  $16v^2 - 24v + 9$

8)  $27m^2 + 90m + 75$

$$9) \ 45b^2 - 60b + 20$$

$$10) \ 5x^2 - 40xy + 80y^2$$

$$11) \ 25m^2 - 10mn + n^2$$

$$12) \ 9m^2 + 30mn + 25n^2$$

**Factor each polynomial (Difference of Squares and Perfect Square Trinomials). Always check for the GCF first!**

$$13) \ a^2 - 8a + 16$$

$$14) \ n^2 - 1$$

$$15) \ 9a^2 - 4$$

$$16) \ 25n^2 + 40n + 16$$

$$17) \ 45n^2 + 150n + 125$$

$$18) \ 3k^2 - 24k + 48$$